

# CLAIMS

We claim:

1. A method, operable on a computer system, for streamlining the manual distribution of a plurality of objects within a display using an input device, the display presenting a surface suitable for dropping objects into, the input device capable of converting user input into a two-dimensional position to drive the position of a cursor on the display, the method comprising:
  - *Detecting the user action of dragging one or more objects from an external source over said display using said input device*
  - *While at least one said object remains undropped, continuing to execute the following actions:*
    - a) *Displaying a set of visual representations of said objects proximal to current position of said cursor representing a subset or all of said dragged objects, and*
    - b) *When the user's intention to drop an object is detected, executing the following actions:*
      - b1) *Processing the dropping of the first object in the said list of attached objects, and*
      - b2) *Removing the said representation of said dropped object from said set visual representations attached to said cursor*
2. The method of claim 1 wherein the user is able to abort or temporarily leave and re-enter the mode of dropping multiple objects, said method comprising
  - *Signaling the intent to temporarily exit drag-and-drop mode (for example, by pressing the 'escape' key)*
  - *Doing other work in the interface (deleting or rotating an image)*
  - *Signaling the intent to re-enter drag-and-drop mode (for example, by pressing the 'd' key)*
  - *Continuing the interact with the drag-and-drop tool*
3. The method of claim 1 wherein the set of icons are further arranged in a regular row extending from the right of the cursor position and sorted by selection order with the icon representing the next object to be dropped at the left-most position.
4. The method of claim 1 wherein the set of icons are further arranged in a regular column extending down from the cursor position and sorted by selection order with the icon representing the next object to be dropped at the top-most position.
5. The method of claim 1 wherein the set of icons representing the dragged objects that are displayed is further limited to a fixed number or the number of objects remaining, whichever is less.
6. The method of claim 5 wherein the final object in the set of icons representing the dragged objects is further modified to indicate that additional files remain to be dropped beyond those that are visible in the fixed-size list of icons, should this be the case, the method comprising one of

- *Applying an alpha gradient to a thumbnail such that it fades to transparency*
  - *Appending an icon indicating the presence of additional but unseen icons, including but not limited to "+" or "..."*
7. The method of claim 1 wherein the set of icons attached to the cursor can be further manipulated by the user, the method comprising
- *Rolling the mouse wheel or pressing a key such as the right arrow key to send the object in the first position within the set of objects attached to the cursor to the last position and refreshing the displayed list of icons accordingly*
  - *Rolling the mouse wheel in the opposite direction or pressing a key such as the left arrow key to send the object in the last position within the set of objects attached to the cursor to the first position and refreshing the displayed list of icons accordingly.*
8. The method of claim 1 wherein an object being dropped is an image, and further the icon representing said image is a reduced-resolution version of said image.
9. The method of claim 1 wherein additional objects can be inserted into the set of icons attached to the cursor, the method comprising
- *Moving the pointing device such that the cursor is positioned over a non-dragged object to be added to the set of dragged objects,*
  - *Detecting the user's intention to insert said non-dragged object into the set of dragged objects, for example by pressing and releasing the second button on said pointing device*
  - *Adding a representation of said non-dragged object to the set of dragged objects*
10. The method of claim 1 wherein objects can be removed from the set of icons attached to the cursor, the method comprising
- *Signaling the intent to remove the first item from the list (for example, by pressing the 'delete' key)*
11. A computer readable medium having computer instructions stored thereon for implementing a method of streamlining the manual distribution of a plurality of objects within a display using an input device, the display presenting a surface suitable for dropping objects into, the input device capable of converting user input into a two-dimensional position to drive the position of a cursor on the display, the method comprising:
- *Detecting the user action of dragging one or more objects from an external source over the display using the input device*
  - *While at least one object remains undropped, continuing to execute the following actions:*
  - *a) Displaying a set of visual representations of data proximal to the current cursor position representing a subset or all of the dragged objects*
  - *b) When the user's intention to drop an object is detected, executing the following actions:*
  - *b1) Processing the dropping of the first object in the said list of attached objects*

- *b2) Removing the said representation of said dropped object from said set visual representations attached to said cursor*
12. The computer readable medium of claim 11 wherein the user is able to abort or temporarily leave and re-enter the mode of dropping multiple objects, said method comprising
    - *Signaling the intent to temporarily exit drag-and-drop mode (for example, by pressing the 'escape' key)*
    - *Doing other work in the interface (deleting or rotating an image)*
    - *Signaling the intent to re-enter drag-and-drop mode (for example, by pressing the 'd' key)*
    - *Continuing the interact with the drag-and-drop tool*
  13. The computer readable medium of claim 11 wherein the set of icons are further arranged in a regular row extending from the right of the cursor position and sorted by selection order with the icon representing the next object to be dropped at the left-most position.
  14. The computer readable medium of claim 11 wherein the set of icons are further arranged in a regular column extending down from the cursor position and sorted by selection order with the icon representing the next object to be dropped at the top-most position.
  15. The computer readable medium of claim 11 wherein the set of icons representing the dragged objects that are displayed is further limited to a fixed number or the number of objects remaining, whichever is less.
  16. The computer readable medium of claim 15 wherein the final object in the set of icons representing the dragged objects is further modified to indicate that additional files remain to be dropped beyond those that are visible in the fixed-size list of icons, should this be the case, the method comprising one of
    - *Applying an alpha gradient to a thumbnail such that it fades to transparency*
    - *Appending an icon indicating the presence of additional but unseen icons, including but not limited to "+" or "..."*
  17. The computer readable medium of claim 11 wherein the set of icons attached to the cursor can be further manipulated by the user, the method comprising
    - *Rolling the mouse wheel or pressing a key such as the right arrow key to send the object in the first position within the set of objects attached to the cursor to the last position and refreshing the displayed list of icons accordingly*
    - *Rolling the mouse wheel in the opposite direction or pressing a key such as the left arrow key to send the object in the last position within the set of objects attached to the cursor to the first position and refreshing the displayed list of icons accordingly.*
  18. The computer readable medium of claim 11 wherein an object being dropped is an image, and further the icon representing said image is a reduced-resolution version of said image.
  19. The computer readable medium of claim 11 wherein additional objects can be inserted into the set of icons attached to the cursor, the method comprising

- *Moving the pointing device such that the cursor is positioned over a non-dragged object to be added to the set of dragged objects,*
  - *Detecting the user's intention to insert said non-dragged object into the set of dragged objects, for example by pressing and releasing the second button on said pointing device*
  - *Adding a representation of said non-dragged object to the set of dragged objects*
20. The computer readable medium of claim 11 wherein objects can be removed from the set of icons attached to the cursor, the method comprising
- *Signaling the intent to remove the first item from the list (for example, by pressing the 'delete' key)*